The Maryland Environmental Literacy Standards

The Maryland Environmental Literacy Standards represent the knowledge and skills relating to the environment that students will have upon graduation from a Maryland school system. The students graduating from Maryland schools environmentally literate will not all become professional environmentalists but will be the informed and capable stewards of their environment.

The Maryland Environmental Literacy Standards present a shift in thinking, rather than viewing and teaching standards linearly, there is the challenge to view and teach them as an interdependent network of ideas and skills. The standards can be used to enhance existing courses in the sciences, government, economics, health, or can be used as a template for the design of a new course. Backward mapping from these standards would be appropriate in producing the learning outcomes for PreK- 8 students as illustrated in the national standards documents.

The standards are addressed through a variety of courses, service learning, and classroom and outdoor experiences from Grades PreK-12. The Maryland Environmental Literacy Standards provide a flexible structure that allows for more in-depth study of particular issues using critical thinking skills and issues investigation to learn long-term reasoning, research and interpretation skills. Because environmental education is interdisciplinary, previous efforts to define discipline centered content standards have not fully captured its essence. Strands were developed to reflect the integrative nature of environmental education in both the natural and social sciences.

The Maryland Environmental Literacy Standards are based on national standards, including:

- National Science Education Standards
- National Council of Social Studies Standards
- North American Association for Environmental Education
- Ocean Literacy Standards (draft)
- Education for Sustainability Standards (draft)

Issues- based investigation forms the cornerstone of the program, and is used as a teaching method that allows students to systematically study and evaluate complex environmental issues. The content of several indicators can be addressed simultaneously within the context of an issue of local, regional or global concern.

The final standard, Sustainability, forms the other major support to the framework. Natural processes are studied through the standards relating to the life and Earth/Space sciences. Human systems are investigated through differing geographic, cultural, societal, economic and political views. The interaction of these natural and human systems constitutes the majority of the study, with the concept of sustainability as the equilibrium point- the touchstone of positive human and natural interactions.

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Critical thinking, research, use of modeling and technology, and methods of social and scientific investigation are addressed through existing Skills and Process Standards. These can be viewed at:

- Technology Standards http://www.marylandpublicschools.org/MSDE/programs/technology/techstds/student_standards
- Science http://mdk12.org/share/vsc/vsc_biology_hs.pdf
- Social Studies http://www.mdk12.org/instruction/curriculum/social_studies/standard6/grade_6_8_info.html

Stewardship and action are addressed through the issues-based model. Teachers are encouraged to provide students with a variety of on-campus and community or regional experiences; as well as to engage students in identifying, planning and implementing authentic projects that result in a change to the environment.